

Product datasheet

Anti-Prealbumin antibody [EPR20971] α b215202

Recombinant RabMAb

1 References 7 Images

Overview

Product name	Anti-Prealbumin antibody [EPR20971]
Description	Rabbit monoclonal [EPR20971] to Prealbumin
Host species	Rabbit
Tested applications	Suitable for: IHC-P, IHC-Fr, WB, IP
Species reactivity	Reacts with: Mouse
Immunogen	Recombinant full length protein within Mouse Prealbumin aa 1 to the C-terminus. The exact sequence is proprietary. Database link: P07309
Positive control	WB: Mouse plasma and serum. IHC-P: Mouse cerebrum and liver tissues. IHC-Fr: Mouse brain (choroid plexus) and liver tissues. IP: Mouse plasma.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.</p> <p>We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.</p>

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR20971
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab215202** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IHC-Fr		1/100. Perform heat-mediated antigen retrieval by using sodium citrate buffer (10mM citrate pH 6.0 + 0.05% Tween-20). We recommend to optimize primary antibody dilution depending on the tissue being tested.
WB		1/1000. Detects a band of approximately 15, 30 kDa (predicted molecular weight: 15 kDa).
IP		1/30.

Target

Function	Thyroid hormone-binding protein. Probably transports thyroxine from the bloodstream to the brain.
Tissue specificity	Detected in serum and cerebrospinal fluid (at protein level). Highly expressed in choroid plexus epithelial cells. Detected in retina pigment epithelium and liver.
Involvement in disease	Defects in TTR are the cause of amyloidosis transthyretin-related (AMYL-TTR) [MIM:105210]. A

hereditary generalized amyloidosis due to transthyretin amyloid deposition. Protein fibrils can form in different tissues leading to amyloid polyneuropathies, amyloidotic cardiomyopathy, carpal tunnel syndrome, systemic senile amyloidosis. The disease includes leptomeningeal amyloidosis that is characterized by primary involvement of the central nervous system. Neuropathologic examination shows amyloid in the walls of leptomeningeal vessels, in pia arachnoid, and subpial deposits. Some patients also develop vitreous amyloid deposition that leads to visual impairment (oculoleptomeningeal amyloidosis). Clinical features include seizures, stroke-like episodes, dementia, psychomotor deterioration, variable amyloid deposition in the vitreous humor.

Defects in TTR are a cause of hyperthyroxinemia dystransthyretinemic euthyroidal (HTDE) [MIM:145680]. It is a condition characterized by elevation of total and free thyroxine in healthy, euthyroid persons without detectable binding protein abnormalities.

Defects in TTR are a cause of carpal tunnel syndrome type 1 (CTS1) [MIM:115430]. It is a condition characterized by entrapment of the median nerve within the carpal tunnel. Symptoms include burning pain and paresthesias involving the ventral surface of the hand and fingers which may radiate proximally. Impairment of sensation in the distribution of the median nerve and thenar muscle atrophy may occur. This condition may be associated with repetitive occupational trauma, wrist injuries, amyloid neuropathies, rheumatoid arthritis.

Sequence similarities

Belongs to the transthyretin family.

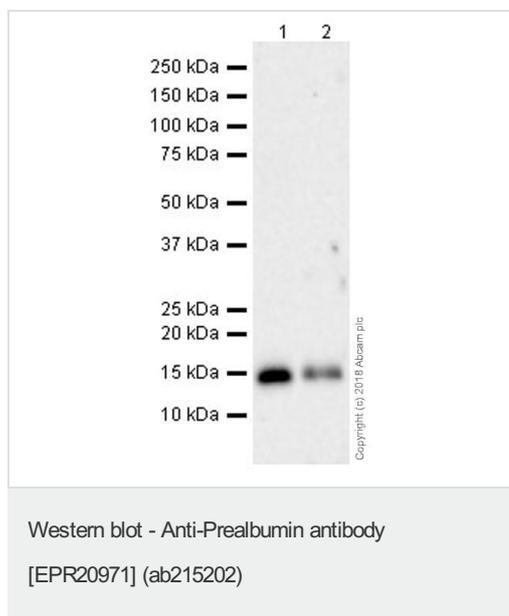
Domain

Each monomer has two 4-stranded beta sheets and the shape of a prolate ellipsoid. Antiparallel beta-sheet interactions link monomers into dimers. A short loop from each monomer forms the main dimer-dimer interaction. These two pairs of loops separate the opposed, convex beta-sheets of the dimers to form an internal channel.

Cellular localization

Secreted. Cytoplasm.

Images



All lanes : Anti-Prealbumin antibody [EPR20971] (ab215202) at 1/1000 dilution

Lane 1 : Mouse plasma

Lane 2 : Mouse serum

Lysates/proteins at 20 µg per lane.

Secondary

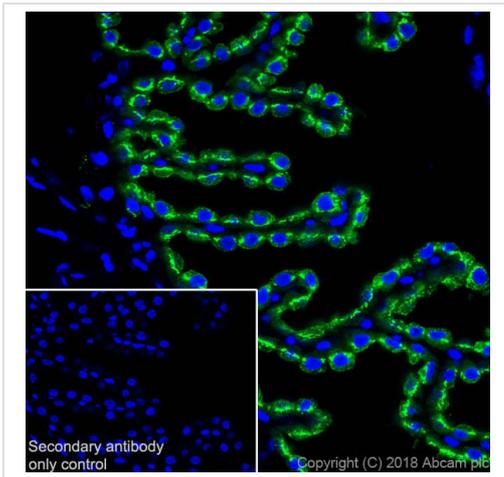
All lanes : VeriBlot for IP Detection Reagent (HRP) (ab131366) at 1/1000 dilution

Predicted band size: 15 kDa

Observed band size: 15 kDa

Exposure time: 3 minutes

Blocking/Dilution: 5% NFD/MTBST

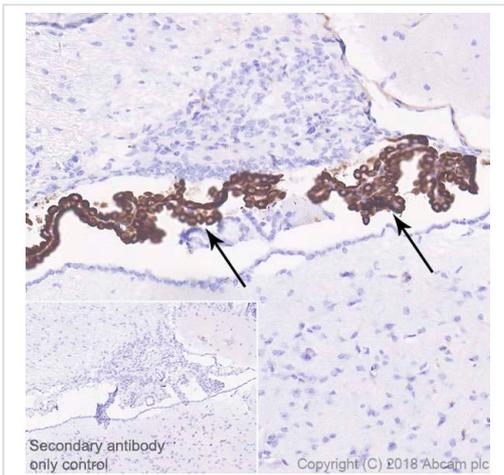


Immunohistochemistry (Frozen sections) - Anti-Prealbumin antibody [EPR20971] (ab215202)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse brain (choroid plexus) tissue labeling Prealbumin with ab215202 at 1/10000 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Positive cytoplasmic staining in the endothelial cells of choroid plexus, negative staining in the endothelial cells of blood vessels on mouse brain tissue section (PMID: 19539719; 20462362).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.

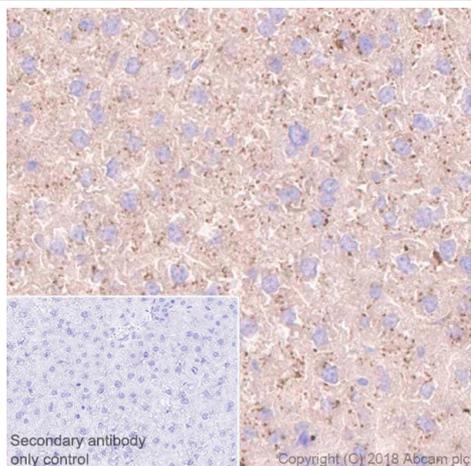


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [EPR20971] (ab215202)

Immunohistochemical analysis of paraffin-embedded mouse cerebrum tissue labeling Prealbumin with ab215202 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Cytoplasmic staining in choroid plexuses (arrows) of mouse cerebrum (PMID: 25758461; PMID: 19032346). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

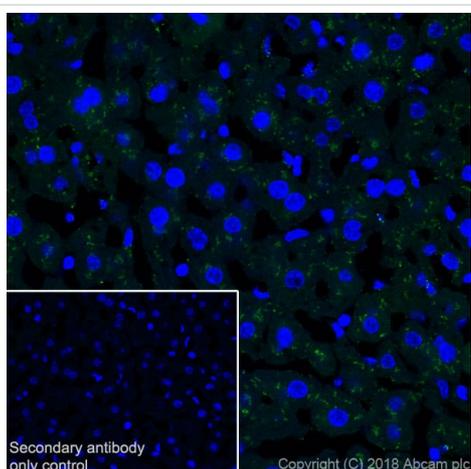


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Prealbumin antibody [EPR20971] (ab215202)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Prealbumin with ab215202 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP), Ready to use. Cytoplasmic staining in mouse liver (PMID: 25519307; PMID: 19032346). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP), Ready to use.

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

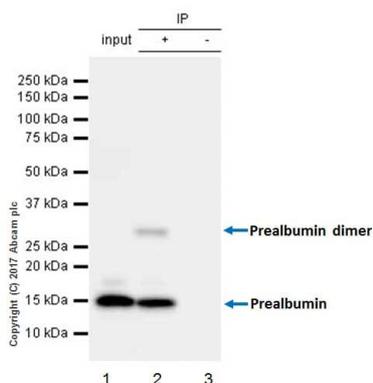


Immunohistochemistry (Frozen sections) - Anti-Prealbumin antibody [EPR20971] (ab215202)

Immunohistochemical analysis of 4% paraformaldehyde-fixed, 0.2% Triton X-100 permeabilized frozen mouse liver tissue labeling Prealbumin with ab215202 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution (green). Positive cytoplasmic staining in the hepatic cells of mouse liver tissue section (PMID: 25519307).

The nuclear counter stain is DAPI (blue).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Immunoprecipitation - Anti-Prealbumin antibody [EPR20971] (ab215202)

Prealbumin was immunoprecipitated from 0.35 mg of mouse plasma with ab215202 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab215202 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/5000 dilution

Lane 1: Mouse plasma 10 µg (Input).

Lane 2: ab215202 IP in mouse plasma.

Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab215202 in mouse plasma.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 15 seconds.

The band shown at 30 kDa is likely to be a dimer of Prealbumin

based on the literature (PMID: 19279259).

Why choose a recombinant antibody?



- Research with confidence**
Consistent and reproducible results
- Long-term and scalable supply**
Recombinant technology
- Success from the first experiment**
Confirmed specificity
- Ethical standards compliant**
Animal-free production

Anti-Prealbumin antibody [EPR20971] (ab215202)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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